A new species of *Muricopsis* (Muricidae: Muricopsinae) from São Tome Island

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KEYWORDS. Gastropoda, Muricidae, Muricopsinae, *Muricopsis*, new species, West Africa

ABSTRACT. A new species of *Muricopsis* from São Tomé, West Africa, is described and compared with other species previously described from the same area.

INTRODUCTION

A new species of *Muricopsis* was collected among material obtained while scuba diving at 30-35 m, during a recent collecting trip to São Tomé islands. It is described in the present work.

Muricopsis s. s. is represented in West Africa by numerous species (Houart, 2005). The islands of the Guinean Gulf seem to be one of the areas where most species of this genus are present, with the type locality of one of them in Annobon, two in Príncipe and three in São Tomé.

Abbreviations

AMNH: American Museum of Natural History, New York, USA.
BMNH: Natural History Museum, London, Great Britain.
MNHN: Muséum National d'Histoire Naturelle, Paris, France
MNCN: Museo Nacional de Ciencias Naturales, Madrid, Spain.
USNM: National Museum of Natural History, Smitsonian Institution, Washington, USA.

CER: collection of Emilio Rolán
CJH: collection of José María Hernández
CPR: collection of Peter Ryall
CRH: collection of Roland Houart
CSG: collection of Sandro Gori

IP	Infrasutural primary cord (primary cord on shoulder)
P1	Shoulder cord
P2-P6	Primary cords of the convex part of the teleoconch whorl
ADP	Adapical siphonal cord
MP	Median siphonal cord
ID	Infrasutural denticle of aperture
D1 to D5	Denticles of the convex part of the aperture

[Terminology used to describe the spiral cords and the internal denticles of the outer lip (based on Merle 1999, 2001)]

SYSTEMATICS

Family **MURICIDAE** Rafinesque, 1815
Subfamily **MURICOPSINAE** Radwin & D'Attilio, 1971
Genus ***Muricopsis*** Bucquoy & Dautzenberg, 1882

***Muricopsis hernandezi* n. sp.**
Figs 1-6, 11-14

Type material. Holotype (Fig. 1) of 12.0 mm MNCN 15.05/48015; paratypes in the following collections: AMNH (1, Fig. 3), BMNH (1); MNHN Moll. 9687 (1, Fig. 2), USNM 1097976 (1), CER (3 shells and 25 juveniles, Figs. 5, 6-10), CJH (12, Fig. 4), CPR (1), CRH (1), CSG (7).

Other material. Ilha das Cabras, under rocks, 12-20 m, paratype of *M. delemarrei* Houart (2005: 121, fig. 6).

Type locality. Lagoa Azul, São Tomé Island, at a depth of 30-35 m.

Distribution. Saõ Tomé Island, Lagoa Azul, and Ilha das Cabras, 12-35 m.

Description. Shell (Figs 1-5) slender, lanceolate, spinose, solid. Protoconch of one whorl (Figs. 6, 11-13) white, with a single keel adapically and dense microsculpture formed by tubercles and lines (Fig. 14) observed under high magnification.
Teleoconch with 5-5 ½ whorls, rather increasing constantly. Axial sculpture consisting of broad ribs: first teleoconch whorl with 9, second with 8 and third with 7; last whorl with 6 or 7 ribs. Spiral sculpture of primary cords and numerous threads: first whorl with visible P1-P3, second with P1-P3, starting IP and spiral threads, third and fourth with IP, P1-P3 and numerous threads, last whorl with IP, P1-P6, ADP and MP, and numerous threads. P1-P4 of approximately same strength, P5 smaller, P6 narrow, low, almost obsolete, ADP and MP small, approximately of same strength. 2-4 spiral threads of variable strength between primary cords. Small, acute, open spines at intersection of axial ribs and spiral cords. Spines of P1 and P4 weakly larger. Cords more obvious on ribs, weak or obsolete on their intervals.
Aperture ovoid elongate; columellar lip curved with 1 or 2 slight but obvious nodes, corresponding to spiral cords; erect abapically, adherent at abapical extremity, outer lip with 5 strong broad denticles within: ID, D1 and D2 fused, broad, D3-D5. Peristome prominent. Siphonal canal short, narrowly open, slightly incurved dorsally.
Background colour pink-cream; dark brown blotches on shoulder, between P2 and P4, near P3, P5, ADP and MP, and on crossing points between spiral cords and axial ribs. Aperture greyish white with yellowish brown line on edge.

Remarks. The paucispiral protoconch in West African *Muricopsis* species, denoting non-planktotrophic larval development, is probably the reason of their endemism, restricted to some islands or well delimited areas. This is probably the reason also why several populations got isolated during their adaptation to different habitats, even within one island.
Muricopsis hernandezi n.sp. differs from all other species living in the São Tomé island or having similar shells:
M. richardbinghami Petuch, 1987 from Florida, USA, is comparatively larger, the background colour is tan with red bands, and the siphonal canal is much longer and broader.
M. matildae Rolán & Fernandes, 1991, from São Tome has a reddish not spinose shell with nodules and the protoconch is constantly dark. *M. rutilus* (Reeve, 1846) from Ghana and *M. mariangelae* Rolán & Fernandes, 1991 from São Tome (Figs 7, 8) have nodulous axial ribs, the cords are also present in the intervals and the colour is distributed in bands: dark subsuturally, white below; another dark one in the last whorl visible in a short portion of the suture in previous whorls; another white one below; the base is dark. When the lips are well developed, the aperture is wider than in *M. hernandezi*; also, the external lip is narrower and without spines.
M. delamarrei Houart, 2005, from Principe Island (Fig. 10), has a colour pattern similar to that of the two previous species; most of the whorls have nodules on the crossing points of ribs and cords, and there are spines only on the last whorl.
The existence of some shells with a very different pattern (Fig. 9) suggests the possibility of more species being present in São Tomé, in yet unexplored habitats.

Etymology. The species is named after José María Hernández, diving and collecting companion in the recent expedition to São Tomé.

ACKNOWLEDGEMENTS

To Jesús Méndez, who made the SEM photographs in de Centro de Apoyo Científico y Tecnológico a la Investigación (CACTI) of the University of Vigo; to Jesús S. Troncoso, of the Department of Ecology of the University of Vigo for his authorization to use his equipment for the optical photos. To Roland Houart who made important suggestions in order to better the work. António A. Monteiro made the English revision.

Figures 1-10

1-6. *Muricopsis hernandezi* n.sp. **1.** Lagoa Azul, São Tomé Island, at a depth of 30-35 m.Holotype, (MNCN 15.05/48015), 12.0 mm; **2-5.** Paratypes: **2.** (MNHN Moll. 9687), 11.3 mm; **3.** (AMNH), 11.1mm; **4.** (CJH) 10.5 mm; **5.** (CER), 10 mm; **6.** Protoconch and first whorls of teleoconch, paratype (CER).
7-8. *Muricopsis mariangelae* Rolán & Fernandes, 1991, São Tomé **7.** 11.9; **8.** 10.5 mm; 9. *Muricopsis* cf. *mariangelae,* unusual pattern, 11.0 mm.
10. *Muricopsis delamarrei* Houart, 2005. Principe Islands (holotype MNHN), 11.4 mm (photo R. Houart).


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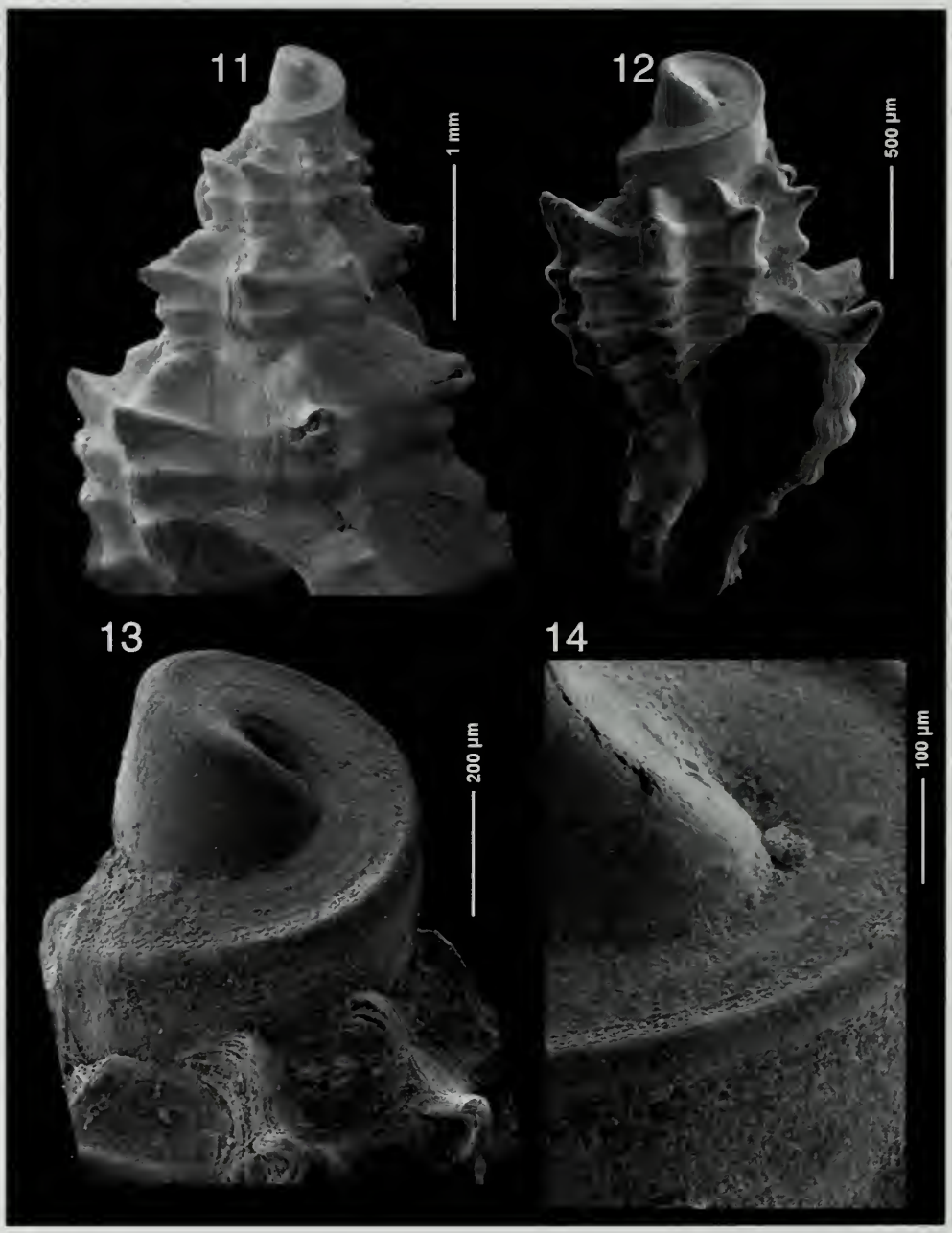

Figures 11-14.

11-12. Protoconch and first whorls of teleoconch of *Muricopsis hernandezi*, paratypes (CER). **13.** Protoconch. **14.** Microsculpture.